REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-6 and 8-12 are presently pending in this application.

In the outstanding Office Action, Claims 1-6 and 8-12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Takeuchi (U.S. Patent 3,991,254) in view of Iseli et al. (U.S. Patent 4,503,128) and Clough et al. (U.S. Patent 5,326,633), and further in view of Lange et el. (U.S. Patent 4,166,147); and alternatively, Claims 1-6 and 8-12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Takeuchi in view of Iseli et al. and Clough et al., and further in view of Lange et el. as evidenced by JP 06-239656 (hereinafter "JP '656").

The outstanding Office Action asserts that the subject matter recited in Claim 1 is obvious over the above cited references. Specifically, the Office Action states that "Takeuchi discloses a filter for the purification of an exhaust gas comprising a porous ceramic carrier (520) configured to filter particles from an exhaust gas" but that "Takeuchi does not disclose wherein the filter further comprises a catalyst coat layer ... and wherein the porous ceramic carrier has a porosity of 40- 80 % and a thermal conductivity of a filter body comprising the porous ceramic carrier and the catalyst coat layer is 0.3-60 W/mK." Regarding all these deficiencies, that is, the catalyst coat layer, the porosity of the porous ceramic carrier, and the thermal conductivity of a filter body comprising the porous ceramic carrier and the catalyst coat layer, the Office Action states that "the person having ordinary skill in the art ... would have been motivated to modify the filter of Takeuchi ... because: (1) Iseli, Clough, and Lange are *all directed to materials for Use at high temperature and/or high erosive environments*. (e.g. that encountered by the filters of Takeuchi); (2) both Clough and Lange *contemplate use of their respective materials as a coating or composite material for catalyst*

supports (e.g. the porous ceramic carrier (520) of Takeuchi; and (3) Iseli notes *the use of rare earth oxides in his coating material as a means of varying the chemical properties of the coating*, e.g. with the rare earth oxide serving as a "catalyst active component"" (emphasis added in italic) and that the person having ordinary skill in the art ... would have been motivated to modify the filter of Takeuchi to provide for spray- coating of the porous ceramic carrier (520) with the titania sol of Lange as taught by Iseli, and varying the porosity of the catalyst coat layer (as taught by both Iseli and Clough) so as to provide a porous ceramic carrier having a porosity of 40-80%, a thermal conductivity of 0.3-60 W/mK, and containing a substance having a refractive index greater than that of the oxide ceramic; the coat layer comprising an oxide ceramic (e.g. alumina as taught by Iseli) and catalyst active component (e.g. rare earth oxides as taught by Iseli), and a substance having a refractive index larger than a refractive index of the oxide ceramic (e.g. titania as taught by Lange)." Applicants respectfully traverse as follows.

As stated in the previous response, Takeuchi is directed to a high temperature *insulating structure*, and describes an insulating layer (c) disposed in a space formed between the inner wall and outer wall of a double structure such as one formed by an outer container encasing a catalyst device, *clearly not a porous ceramic carrier configured to filter particulates in an exhaust gas*. Iseli et al. and Clough et al. being directed to a thermally sprayable ceramic and a coated substrate, Iseli et al. simply describes a method in which a cordierite is thermally spayed by flame or plasma onto certain components to withstand mechanical, thermal and abrasive conditions and Clough et al. merely describes coating a substrate such as SiC and cordierite with tin oxide. Moreover, according to Iseli et al., the coating provides a porosity of only up to 40 volume %, which is believed to be still too low for a filter. Finally, Lange et el. is directed to a shaped and fired TiO_2 article and cited to show "a titania sol with iron oxide as a pigment." As such, the proposed device based on

Takeuchi in the Office Action is believed to be a product of hindsight guided by Applicants' disclosure and lack a proper motivation to combine and modify the Takeuchi insulating structure. Nor do the cited references teach or suggest "a catalyst coat layer comprising at least one oxide ceramic and a catalyst active component and coating the porous ceramic carrier, the catalyst coat layer further comprising a first substance having a thermal conductivity higher than the oxide ceramic, a second substance having a refractive index larger than a refractive index of the oxide ceramic, or a colored pigment, wherein the porous ceramic carrier has a porosity of 40-80% and a thermal conductivity of a filter body comprising the porous ceramic carrier and the catalyst coat layer is set to be 0.3-60 W/mk" as recited in Claim 1. Therefore, Applicants respectfully request that the outstanding obviousness rejection be withdrawn.

Since Claims 2-6 and 8-12 depend directly or indirectly from Claim 1, substantially the same arguments set forth above also apply to these dependent claims. Hence, Claims 2-6 and 8-12 are believed to be allowable as well.

In view of the discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

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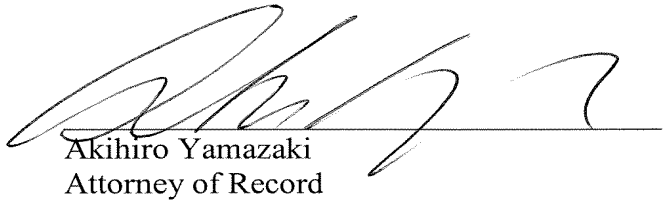

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